



THOMAS G. NEWMAN,
EDITOR.

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EDITORIAL BUZZINGS.

☞ The *Prairie Farmer* is publishing Lizzie Cotton's advertisement. Mrs. L. Harrison should give the editor of the *Farmer* a lecture on *frauds*. P. J. England, of Fancy Prairie, Ill., sent us a marked copy of it.

☞ We have given more than the usual space this week to convention reports. Those who are interested, like to read about them as soon as possible after they are held; and as they present the *freshest* news of the pursuit, all our readers will appreciate their early publication.

☞ We have received a very neat Programme of the Ohio State Convention to be held in joint session with the Northwestern Ohio, Northwestern Pennsylvania, and Western New York Association, held at Cleveland, O., Feb. 19 and 20. The topics discussed, led by essays from prominent bee-keepers, were numerous and varied, and we have no doubt of its having been an interesting meeting. We expect to publish a good report very soon from the efficient Secretary, Miss Dema Bennett, of Bedford, O.

Do Not Stand in your Own Light.—This is what friend Alley says about the Honey Almanac, in the *Apiculturist* for February, which, by the by, is an excellent number, and full of valuable information:

How many of our readers ordered one hundred or more of Brother Newman's Almanacs? If you have not bought a quantity of them and distributed them in your neighborhood, you stand in your own light. A cheaper and more effectual way of advertising your honey about your home cannot be devised.

Apicultural News from Germany.—The Rev. S. Roese, of Maiden Rock, Wis., has translated the following items of interest from the latest periodicals from Germany:

The January number of the *Deutsche Bienen-Vater aus Boehmen*, brings the sad news of the sudden death of Pastor A. Schmidt, of Mekle, President of the Central Verein of German bee-keepers in Bohemia. President A. Schmidt was born Jan. 13, 1846, in Saaz, Germany, and served [aside from his ministerial duties] with energy and faithfulness in the cause of apiculture. On the evening of Dec. 4, 1889, President A. Schmidt, manifested great cheerfulness at a social entertainment, and on Dec. 5, at 8 a.m., he was found a corpse in his bed at the parsonage, caused by congestion of the brain. The sudden death of this great man, who was much beloved by all bee-keepers far and near, is much mourned over. Officers and members of the various bee-keepers associations, sections, etc., followed the deceased to his last resting-place, on Dec. 9, at 10 a.m., at Saaz, his birth-place.

Pastor Weygant's new method of artificially heating bee-houses, causes great excitement among German bee-keepers.

The watering of bees during their long winter confinement, has been, by the majority of German bee-keepers, declared unimportant—50 against 2.

Pastor Weygant, last summer, gave a five days' course of free lectures on bee-keeping at Flaeht, in Germany, to about 60 interested listeners; from tender youth to those having silver-mixed hair, were seated at this Gamaliel's feet, to receive instructions, and Mr. Kellen, editor of the *Luxembourg Bee-Gazette*, declares him a second Dzierzon.

☞ The *Indiana Farmer* of last week contains the following concerning the bees in that State:

A bee-keeping neighbor at Irvington told us last week that his bees were quite lively, bringing in pollen and honey from the soft maple buds. He also said that the colonies were in remarkably healthy condition, owing to the mild winter, and will be able to do good work this spring and summer.

And if spring dwindling is not severe, we may look for a good crop of honey next season; for the condition of the bees in Indiana, is but a sample of their condition all over the Northwest.

☞ The *California Farmer and Dealer* has changed hands and form. The February number contains 24 pages and cover, is nicely printed, and brimful of choice reading matter for the farmer and dealer, on home, horticulture, and business. It is published at 109 California Street, San Francisco, Calif.

☞ F. A. Lockhart, residing at Lake George, N. Y., writes as follows:

The Almanacs I received of you were just splendid. When I distributed them, I sold \$50.00 worth of honey in one day! I credit half of this to the use of the Honey Almanacs.

☞ The Queen of all bees is the husking-bee. You can tell her by her "red ear."

They all Took It.—A very enthusiastic admirer, and esteemed correspondent, of the BEE JOURNAL, kindly offered to represent it, and take subscriptions, at a recent State bee-keepers' convention. The pleasing results of his canvass he tells in the following paragraph, which, at the same time, shows how the AMERICAN BEE JOURNAL is regarded in at least one State:

I asked permission to say a few words in favor of the AMERICAN BEE JOURNAL at the convention, but the President told me in advance, that I would not get a single subscriber, as they all took it. He gladly gave me the opportunity, but the result proved him to be a true prophet.

Honey and La Grippe.—Dr. A. B. Mason, of Auburndale, O., on Feb. 13, 1890, writes as follows:

I copied your article, "Honey for La Grippe," on page 35, and handed it to the *Toledo Blade*. It was in the next day's paper, and before night some of the neighbors were here after honey for their Grippe ones. It made quite a demand for honey. As I furnish news items for the *Blade*, it did not occur to me to sign my name. If I had, I guess I would have got rid of all my surplus.

I have not had La Grippe yet; and this reminds me. There are five in our family. We have honey on our table at every meal, and two of us eat of the honey at nearly every meal, and the other three seldom eat of it. The three abstainers have had La Grippe, and the other two have not.

Honey Almanacs.—Rev. S. Roese, of Maiden Rock, Wis., thus gives his experience in using the Honey Almanacs:

My experience in retailing honey shows that the Honey Almanac is doing a great work. One family, where I left honey and an Almanac, sent word to me to send more honey, as it had proved of great benefit as a medicine in the family; the children troubled with worms were relieved; and the head of the family, who had suffered so long from constipation, was helped at once. To-day, the Rev. J. Barker, of the Baptist Church, to whom I sent a small jar of honey for his cough and cold, called at my house and purchased 30 pounds of honey, stating that it not only helped his cold, but relieved his lung complaint, constipation, etc.

☞ The *Canadian Bee Journal* is in the future to be published each alternate week with the *Canadian Poultry Journal*—making each an independent semi-monthly, with premium at \$1.00 a year. We are glad to see the two papers separated. Experience proves that the papers devoted to two pursuits, and published in one, are not satisfactory. Both papers will be sent to one address when required at the same price as now—\$1.00 a year. We wish our Canadian cotemporary success in the "new departure."

☞ Mr. George Hilton, Fremont, Mich., has been very ill for some time, but he is now convalescing. We hope for a speedy and full recovery.

QUERIES REPLIES.

Methods Used to Prevent the Swarming of Bees.

Written for the American Bee Journal

Query 688.—Which do you find the best plan to prevent swarming—giving abundant room by tiering one set of combs above the other, or giving the necessary room below, all on one level? Or what other preventive do you use?—England.

Give room above.—A. B. MASON.

Extracting is the only effective method that I have tried.—R. L. TAYLOR.

By putting one set of combs above the other.—H. D. CUTTING.

Tiering up above. Giving room below, or on one level, is not practical, though it is practicable.—DADANT & SON.

I think it is about six of one and half-dozen of the other, as to which plan is used.—J. P. H. BROWN.

The upward tiering-plan, as you describe, increasing the storing-room to the capacity of the colony.—J. M. HAMBAUGH.

Either plan works well for extracted honey. Neither will secure the desired result, when working for comb honey.—G. M. DOOLITTLE.

Tiering is, in my judgment, the better of the two. It would take too long to describe other methods and devices that we practice.—MRS. L. HARRISON.

I never had any success with either plan. Keep the queens' wings clipped, and destroy all queen-cells as long as the swarming-fever lasts.—P. L. VIALLO.

Why try to prevent swarming at all? You can keep them back for a time, by giving plenty of room, either at the top or the sides, if given before they start queen-cells.—C. H. DIBBEN.

I have never used the second plan mentioned. The first succeeds in perhaps one-half of the number tried. If tiered up at just the right time, swarming is controlled in a majority of cases.—EUGENE SECOR.

I find the best and only satisfactory manipulation to prevent swarming, in the divisible brood-chamber, and worked by alternating the upper and lower halves of that brood-chamber—of course, always furnishing plenty of surplus room at the same time.—JAMES HEDDON.

I do not know how to prevent swarming. Increase of room for the queen will help, I think, and I do not think that it makes any difference whether you give her room by tiering up, or spreading horizontally.—C. C. MILLER.

Giving room below seems most effective; but "tiering up" is most useful to the keeper of bees. The successful bee-keeper studies to attain what he wants first. What the bees want, is a secondary matter.—J. M. SHUCK.

If combs are to be built by the bees, room above the brood-nest will be more effective than below. An upper story from which the honey is extracted as soon as it is sufficiently evaporated, and abundant ventilation, will generally prevent swarming. I have found ventilation at the top of the hive, of great advantage.—M. MAHIN.

I am careful to "tier up" as fast as the increasing colony needs the room. No neglect is admissible at this time. The "tiering" is all done above the brood-department of the hive, until a swarm issues; if

the top tiering does not prevent swarming entirely, then I tier downward; that is, I place a super with combs, guarded with a metal queen-excluder, below the brood department, and send the swarm back home. This management separates the queen from the old brood department, and compels her to commence anew below.—G. W. DEMAREE.

A combination of both; but I find the best plan is that of close-working frames in the brood-chamber, only bee-space apart. This plan prevents swarming, and the building of bridge-combs; and also forces the bees into sections, as soon as they are put on.—J. E. POND.

Much room by tiering up tends to restrain swarming. With the best hives, it is impossible to give room horizontally, and I do not think that it would be any advantage if we could. I once used the long [New Idea] hives, and could not see that they were an advantage. Removal of the queen is the best way to certainly prevent swarming.—A. J. COOK.

A large, roomy hive is the best preventive against swarming, next to the frequent use of the extractor. The room should be given above the brood, always; for it is the instinct of the bees to store there, and they do so to the best advantage. If plenty of empty combs are placed above the brood on all hives, there will be few swarms that will issue, even in a good honey-flow.—G. L. TINKER.

Either plan will give relief to the colony, and sometimes prevent swarming—but neither can be relied upon at all times to keep the colony from sending out a swarm.—THE EDITOR.

Using Sections After the Honey Has Been Removed.

Written for the American Bee Journal

Query 689.—Will it pay to use sections the second time, or after the honey has been taken out, provided they are clean and sound?—E. C.

Yes.—C. C. MILLER.

Yes.—M. MAHIN.

Yes.—J. M. HAMBAUGH.

Yes! Yes! YES! Always!—G. M. DOOLITTLE.

Yes, if they are clean and sound.—R. L. TAYLOR.

No, sir, not if you are going to sell the honey. I doubt if it will pay, anyway.—JAMES HEDDON.

Ordinarily, it will not; but if they are clean and sound, it will.—MRS. L. HARRISON.

Yes, if they are clean and sound; but they never are.—J. M. SHUCK.

If perfectly clean, they are just as good as new; but if soiled, they might better be thrown away.—EUGENE SECOR.

Certainly. Some such were exhibited by Mr. H. D. Cutting, at the last Michigan State Bee-Keepers' Convention, and looked as good as new.—A. B. MASON.

Why not? Though usually it does not pay to bother with old sections.—A. J. COOK.

No. After sections have been used once, they never can be made to look as neat and as clean as new ones.—P. L. VIALLO.

Yes, if they are neat and clean. If filled with comb, shave it down so that the cells will be only about 1/2-inch deep.—C. H. DIBBEN.

If they are clean, use them. As many manufacturers of sections are now making them "just for the fun of the thing," it will not pay any one to use a soiled section.—J. P. H. BROWN.

Yes; use sections as long as you can keep them clean and nice. Why is not one clean, nice section, just as good as another?—J. E. POND.

If they have been used in wide frames, they will not be soiled, and may be used again; especially the partly-filled sections at the close of a honey-flow.—G. L. TINKER.

It may pay, but if they have been used more than once, they are usually too much soiled for a first-class appearance. That is one of the stumbling-blocks of comb-honey production.—DADANT & SON.

In the first place, "they will not clean." If you just want them for your own use, they will do; but if you expect to sell the honey, do not use them.—H. D. CUTTING.

It pays me well to use them, since learning somewhat more how to manage them. The honey is not quite as nice as that in newly-built combs, but the quality can be improved by leaving the sections on the hives until the nectar is thoroughly evaporated. If this is done, the nectar will keep as well as any.—G. W. DEMAREE.

We doubt whether it would not cost more to make them "clean and sound," than they are worth. They cost so little that we do not think it would ever pay to use them a second time.—THE EDITOR.

Bees Dying in the Cellar.—W. W.

Parker, Sechlerville, Wis., on Feb. 10, says:

I have 19 colonies in the cellar; the winter has been so unusually warm that it is impossible to keep them quiet, consequently there are lots of dead bees, both in and out of the hives. Would it better their condition to take them out, put them into a larger box, and fill in with chaff? Or is it less risk to let them alone?

W. W. PARKER.

By request, Dr. C. C. Miller answers Mr. Parker's questions as follows:

A warm time is rather a trying time in the cellar. I am inclined to believe that I should try to keep them in a little longer, if they can have good air in the cellar. Open the windows and doors at night, so that they will be thoroughly aired, whenever it is warm enough so that it does not cool the cellar too much; and it may be well even to let the cellar remain open in the morning until the bees trouble by flying out. I have sometimes put ice in the cellar, toward spring.—C. C. MILLER.

Frank Vincent, the well-known traveler, author of the recently published book, "Around and About South America," and of a forthcoming work on Central America, furnishes an elaborate leading article on "The Republics of Central America," in the March number of "Frank Leslie's Popular Monthly." Guatemala, Honduras, Salvador, Nicaragua and Costa Rica are graphically described, with numerous and beautiful illustrations, making a contribution of the highest intrinsic interest, as well as of peculiar timeliness in connection with the work of the Pan-American Congress. Other illustrated articles offer attractions in a variety of directions.

The Most Vivid and startling pictures of the terrible tragedy in Washington, which resulted in the death of two of the members of Secretary Tracy's family, are found in "Frank Leslie's Illustrated Newspaper" this week. Other pictures include one in reference to Gen. Sherman's seventieth birthday.

CORRESPONDENCE.

PRIZE ESSAY.

Extracted Honey as Compared with Honey in the Comb.

Written for the American Bee Journal
BY G. W. DEMAREE.

Take into your mouth a piece of newly-built honey-comb, as white as the virgin snow, in which no nectar has been stored, and you will find it as tasteless as a piece of blotting-paper; and I imagine that few people would be inclined to swallow the one substance more readily than the other. Virgin wax is tasteless—why, then, eat wax?

If we trace the history of honey, we find that the ancients used it not merely as a condiment, but as "meat"—a substantial food. "Have ye here any meat? And they gave him a piece of a boiled fish, and of an honey-comb." "And behold there was a swarm of bees, and honey in the carcass of the lion; and he took thereof in his hands, and went on eating."

From the glimpse that we have into the customs and habits of the ancients, we judge that honey was eaten from the hands, as a general thing, though perhaps not always; and this custom, of long standing, gives us a clue to the prejudice in favor of honey in the comb. If honey is to be eaten from the hands, then there are good reasons why it should be taken in the comb, because the comb is not only a receptacle to hold the liquid honey, but the wax, in eating, acts mechanically to retain the sweet on the palate, and makes the eating more pleasurable.

But customs have changed in these modern times, and men take their meals differently from what they did in the ages of the past. Honey, as a rule, is eaten with bread, and the wax is entirely superfluous, the bread performing the mechanical part in delaying the delicious sweet on the palate. The long-standing habit of eating honey from the hands, is the true clue to the prejudice in favor of honey in the comb.

Another reason—and perhaps the chief of all the reasons for the prejudice against honey extracted from the combs—is connected with the fact that previous to the invention of the honey-extractor, there was no method known by which the pure honey in its virgin state could be separated from the combs, free from all foreign matter.

It is a well-known fact that combs of honey are likely to contain more or less of "bee-bread" (pollen), and may

sometimes contain young bees in the larval state. Any process of expelling the liquid honey from the combs by pressure—by whatever form brought to bear—the bruised and broken combs are bound to part with some of their impurities, together with the liquid honey, which impurities mix with, and become a part of, the honey. Hence the just prejudice against the "strained honey" of the long ago.

IMPORTANCE OF THE HONEY-EXTRACTOR

The centrifugal honey-extractor of modern invention, entirely overcomes the foregoing objections. By the use of this machine, the liquid honey is discharged from the cells by centrifugal force, leaving the more solid impurities in the unbroken cells. By this process, the honey in a liquid state is obtained in its immaculate purity.

What a boon to the health and welfare of the human race is the centrifugal honey-extractor! Honey, taken by this process, is the pure, God-given nectar of flowers gathered and stored by the bees, and evaporated in the hives by currents of heated air kept in motion by the fanning wings of the inmates of the hive. No chemical poisons are needed, or used, by the bees to purify the products of the hive, as is the case in the sugar refineries—hence, pure honey, taken by the process which I have described, is the purest and the best, and the safest sweet used for food by the human race.

Honey is a combination of sweets, and has non-drying qualities not found in the chemically-prepared sugars; and hence it has no equal as a sweetener in the culinary arts, and as an adjunct to bread, it is the most pleasing and healthful sweetener in the world.

GRANULATION OF EXTRACTED HONEY.

Nearly all pure honeys have a tendency to become solid—granulate or candy—upon the approach of cold weather; and this fact is received with well-nigh universal regret, on the part of honey-producers, and those who handle the article in the markets. I now regard this as a very great mistake. It is nothing more than a question of convenience.

For a time the writer himself participated in these regrets, because of the inconveniences attending the practical handling of the article in its solid state; but after discovering that the consumers of the article in the bounds of my trade do not object to the candied state, but are more than pleased with it; and after a close and careful study of the nature and composition of the pure nectar of flowers, evaporated to the honey state by the bees,

and also partially by artificial means; having before me samples of honey taken each season for ten or twelve years past, from which to take observations while practicing my studies—I discovered that the best grades of honeys tend to solidity most rapidly, and such honeys endure length of time with the least perceptible change in body and flavor. This being true, the fact that honey solidifies as the temperature lowers, is not only not a thing to be regretted, but is a blessing, though it be a "blessing in disguise" to those who have not gone below the "crust" in their investigations.

Owing to peculiar properties in honey, it maintains a higher temperature by reason of latent heat, than does the body of air with which it is surrounded; but the latter is subject to more rapid change of temperature, hence the disposition of honey to yield up its moisture to the air, or absorb it therefrom, governed wholly by variance in temperature. In the light of these facts, it requires no very profound reasoning to bring one to the conclusion that the "solid state" is the best possible natural protection to honey against atmospheric influences.

I conclude, then, that the natural tendency of honey to become solid—granulate or candy—should be accepted as a matter in course, and the minds of bee-keepers should be directed towards the best methods of handling and popularizing the article.

Christiansburg, Ky.

VERMONT.

Report of the Vermont Bee-Keepers' Convention.

Written for the American Bee Journal
BY J. H. LARRABEE.

I send a report of the recent Bee-Keepers' Convention, as reported in the daily *Free Press and Times*, of Burlington, Vt. We did not affiliate with the International, but I hope that we will do so next year; also I hope to bring about a fuller report of the extent of bee-keeping in the State of Vermont, by means of blanks, to be distributed to all bee-keepers, through the Vice-President in each county. But progress and improvements are hard to bring about in the face of such poor seasons, as we Vermonters have had to endure for three or four years.

The report to which I refer, is condensed as follows:

The Vermont Bee-Keepers Association met at the Van Ness House at Burlington, Vt., on Tuesday, Feb. 4, 1890. The convention was called to order at 1:30 p.m., by President R. H.

Holmes, of Shoreham, and the Secretary, J. H. Larrabee, read the minutes of the last meeting and the new Constitution, which was adopted at the meeting held at Middlebury last year.

The appointment of committees resulted as follows:

Committee on nominations: Addison county, V. V. Blackmer; Chittenden county, George Beecher; Lamoille county, J. W. Smith.

Committee on exhibits: Franklin county, F. M. Wright; Washington county, H. W. Scott; Rutland county, H. L. Leonard.

Committee on resolutions: Miss M. A. Douglass, Miss Lottie L. Crehore, and T. S. Warner.

"Management of bees during swarming," was the subject of the first essay, by V. V. Blackmer, of Orwell, who gave his personal experience in hiving swarms. In the discussion which followed, Mr. Manum gave some interesting information in regard to the control of swarming bees, his method of clipping the wings of queens calling forth questions from several members.

Mr. O. J. Lowrey, of Jericho, being absent on account of sickness, his essay on "Metallic honey-boards," was omitted, and the President called for remarks on the subject, and Messrs. Wright, Cram and Smith responded.

The essay on "The rearing and shipping of queens," by A. E. Manum, who is an enthusiast in the business, called forth an interesting discussion in which the speaker made some interesting answers to questions.

"A book of chronicles," by Miss M. A. Douglass, of Shoreham, was an interesting history of the organization and perfection of the Vermont Bee-Keepers' Association, as evolved from the Addison County Bee-Keepers' Association, organized at Middlebury, in 1875.

The last feature of the afternoon session was an address on "The chemistry of honey and other sugars," by Joseph L. Hills, State chemist. Mr. Hills introduced the polariscope, and gave an exceedingly interesting description of the composition of sugar and honey. At the conclusion of the address, a vote of thanks was unanimously passed by those present.

The subject of the incorporation of honey among the products placed on sale by the Board of Trade was introduced by the President, and at 4:20 the convention adjourned till evening.

An informal canvass among the members present during the intermission, showed that quite a number of bee-keepers in this State were producing from one to eight tons of honey; and that there was a decided opinion in favor of making a strong effort to incorporate honey among the products

put on sale by the Boards of Trade. Storage at a temperature of 90° is necessary for the storage of honey.

THE EVENING SESSION.

The convention was opened at 7:20 p.m., by the reading of reports of Vice-Presidents.

The first essay of the evening, on "Honey-packages," gave some valuable hints in regard to putting up honey, and the kind of packages which would cause the most ready sale in the market. Miss Crehore, in an able and exceedingly business-like manner, told how she marketed honey, and the remarks that followed showed that she certainly understood her business.

Mr. Ferguson, Secretary of the Vermont Board of Trade, introduced the subject of placing honey upon the Board, and some spicy remarks were made by Mr. Davis, of Bradford, in regard to the manner in which the producer of honey is beaten out of his profits, by the commission houses of the larger cities. The discussion then became quite animated.

Prof. G. H. Perkins, State entomologist, with the assistance of a microscope and a diagram, gave an interesting informal talk on the "Bee and its insect enemies." At the conclusion of Prof. Perkins' address, the convention adjourned.

SECOND DAY.

The morning session opened with the report of the Secretary, which showed the association to be in a flourishing condition. The Treasurer's report showed a balance in the treasury, and all debts paid.

The committee on nominations reported the following officers, who were elected:

President, V. V. Blackmer, of Orwell; Vice-Presidents: F. H. Walker, of Manchester; D. S. Hall, of South Cabot; J. E. Crane, of Middlebury; B. P. Greene, of St. Albans; H. L. Leonard, of Brandon; J. W. Smith, of Stowe; M. F. Cram, of West Brookfield; A. J. Albee, of Derby; J. D. Goodrich, of East Hardwick; George Beecher, of Essex; and Secretary and Treasurer, J. H. Larrabee, of Larrabee's Point.

Mr. H. D. Davis discussed "Wintering, and the influence of the 'Pollen theory,'" explaining his success in wintering bees. He claimed that the pollen soured, if it became damp, and therefore must be kept dry. He turns the brood-chambers upon end in wintering, thereby gaining a deeper brood-chamber, in accordance with nature.

MANAGING THE INCREASE.

The consideration of "The control and prevention of increase" was then taken up.

Miss Lottie L. Crehore, of Bradford, illustrated her remarks on the subject by the use of a swarming device, consisting of a brood-chamber attached to one side of a hive. She regulated the increase as she desired, by changing to new brood-chambers. The brood-chambers contain eight frames each, and nine days after the first swarm issued, four of the frames in the old brood-chamber were put into another brood-chamber, upon which other swarms were hived. By means of this device, the bees are driven back into the hive, and an increase is prevented.

Miss Wolcott, of Shoreham, was the next speaker. She said that when fine queens issued, new colonies were formed to the best advantage. By having the queens' wings fully clipped in the spring, and cutting out queen-cells, the issue may be readily regulated, and entirely prevented if no cells are overlooked.

M. F. Cram, of West Brookfield, used the more common methods of regulation, which consist of simply going to the hive before the bees swarm, taking away the queen, and then allowing no queen-cells to hatch. The subject was then generally discussed.

BEE-MATTERS OF INTEREST TO ALL.

In relation to saving queen-cells from desirable colonies, Mr. Holmes said that he would allow no cells to hatch till enclosed in a queen-nursery.

Miss Crehore, in answer to a question, said that she did not use comb over three years old.

Mr. Davis, of Bradford, said that he could not use the comb long, because there would be too much pollen in it.

Mr. Manum and Mr. Cram said that they were troubled with too little pollen.

Mr. Davis thought that there was a difference in localities in relation to pollen.

The best way to dispose of partly-filled sections, Mr. Wright said, was to extract the honey and keep the comb for another year.

Mr. Manum said that it would not be profitable for a bee-keeper who had 50 colonies, to make his own foundation. He thought that Italian bees swarmed more than black bees.

Mr. Wright said that if a man had time, he could make his own supplies profitably, but if he had other work, it would be cheaper to buy them.

Mr. Manum thought that it would be profitable to buy bees, and hire a man to care for them, judging from his experience; but he would not advise a man to do so who had no experience. He thought that one man could manage 300 colonies.

Various speakers said that the best kind of fuel for smoking was poplar

planer-shavings and rotten elm. The Bingham smoker was generally preferred.

Mr. Wright preferred the Italian bees to the blacks, as he found them the most hardy.

The fact was developed that Mr. Holmes completed at this meeting his fifth year as President of the Association, and his services have been fully appreciated by the Association.

The Association adopted resolutions thanking those who had addressed the convention, the Van Ness House, and the railroads, for courtesies extended, and expressing faith in the future of the industry.

Miss Douglass, for the Committee on Resolutions, submitted a proposition for the offering of premiums aggregating \$50, at the State Fair, for the exhibition of honey and bee-keepers' supplies, with special judges.

Mr. Larrabee said that the State Fair, at his suggestion, increased the premiums on honey last year to \$25.

Mr. Manum said that the sum named in the proposition was not enough, and an amendment offered by Mr. Wright, was adopted, increased the sum to \$75, and the resolution was passed. At the proper time the matter will be laid before the managers of the State Fair.

The time and place of the next meeting is left, by the Constitution, with the Executive Committee and officers.

The convention then adjourned, *sine die*.

BASSWOOD.

Some Important Apicultural Problems—Golden-Rod.

Written for the American Bee Journal
BY S. J. YOUNGMAN.

One problem in relation to our favorite occupation is no sooner solved than another serious one stares us in the face. The one I refer to as settled, is the wintering problem, which seems to be simply a matter of conditions in which the bees and their stores should be, at the approach of the winter. A hive properly constructed so as to retain all heat generated by the bees, with packing-material of any kind to also retain all heat and to absorb moisture, and allow the same to escape—this will keep the bees as warm as they possibly can be, supplied by their own heat only, and quite dry, which is undoubtedly a necessary condition for their health and general welfare.

With the foregoing conditions complied with, the presence of pollen need

not be feared, but, on the contrary, it will be a blessing to the bees. As the bees cannot gather pollen enough in this latitude, in the months of March and April, to supply their needs in breeding, consequently I consider a certain quantity of pollen a necessity, if early swarms and populous colonies are desired for the fruit and white clover blooms.

I might outline the causes of bee-diarrhea, which I will admit is sometimes indirectly caused by pollen, but when the conditions are right for diarrhea, the bees would not be safe by the absence of pollen. I think that all the above conditions of wintering, etc., are known and recognized by nearly all professional bee-men, but some of these hints may be of help to some of the beginners, of whom there are a vast number—what a pity that they do not all take the AMERICAN BEE JOURNAL!

DESTRUCTION OF BASSWOOD TREES.

I will now speak of the impending danger to our industry, spoken of in the opening of this article, namely, the destruction of our basswood timber. My bee-keeping friends, this is a very serious evil, that is fast crowding itself to our notice, and calls for the united action of the bee-keeping fraternity in all quarters of our land. The uses of this timber are various; a large number of small trees are cut for staves, even as small as 8 inches in diameter; but it is a shame that such trees should be cut, and no man in the least interested in bees, should allow the trees of such size to be cut, if in his power to prevent it.

But what is denuding our forests of this timber the most, is the manufacturing of sections. Why cannot the bee-keepers agree to not use sections manufactured from linden, but insist upon having them of spruce and poplar, instead. In this locality, in an early day, the basswood was nearly, if not quite, the only source of honey. (I speak of a time when the bees were in a wild state, and the forest covered all the land; of course our honey-flow is not restricted to the basswood now—the clovers and wild asters yield great quantities of nectar, but nothing will ever take the place of the beautiful linden, as a honey-producing source.)

GOLDEN-ROD AS A HONEY-PLANT.

I have always hunted wild bees as a pastime, and although several varieties of the golden-rod grow here in great luxuriance, it has been seldom that bees have been seen on this beautiful plant.

The golden-rod may be entitled to the proud distinction of being the

“national flower,” on account of its being so widely distributed over the whole country, and for its proud and stately beauty; but it should never hold that place on account of its honey-producing qualities, for there are many flowers that will discount it in this respect. The buckwheat is of far more importance as a nectar-bearing plant, and the wild asters can always be relied upon through the severest drouth, and after frost has destroyed all other honey-producing plants.

Lakeview, Mich.

INDIANA.

The Report of the State Bee-Keepers' Convention.

The tenth annual meeting of the Indiana Bee-Keepers' Association, convened in the State Agricultural Rooms, on Wednesday, Jan. 15, 1890, at 1 p.m., and was called to order by the President, Dr. E. H. Collins.

The President's Annual Address

President E. H. Collins delivered his annual address, from which the following extracts are taken:

The study of apiculture during the past 10 to 20 years, has been of unusual interest; because, in it, as in other occupations, the growth of invention has been very rapid and encouraging. The introduction of Italian queen-bees into American apiaries has passed away, and the business has found its legitimate work of furnishing bees and queens and other supplies to the trade, and producing honey for the market.

The honey-flow during the past three seasons has been quite discouraging, so much depends upon climatic conditions. We have passed through two years of drouth and one of cold and wet, yet it is noticeable that where good management prevailed, the yield was generally remunerative. Suppose the circumstances connected with honey-production were to be perfect for a few years, what would be the result? The market would be flooded, and prices ruined, and with this would come sluggishness and decay. But these ever varying conditions constitute a complicated problem, which necessity compels us to solve, and in the solution of which lies the pleasure of pursuit and the enjoyment of attainment. Protect your colonies, and an increase of honey will be the result.

According to the researches of A. I. Root, the following statistics are obtained:

Well-informed bee-keepers lost about 9 per cent. of their colonies, while others lost 17 per cent. The cool weather of June and July prevented

bees from breeding, and the excessive rains washed the honey from the flowers; yet in spite of this, the yield was about 76 per cent. of the crop, being 50 per cent. better than in 1888. In 1880 our State had 146,000 colonies, and produced 1,097,000 lbs. of surplus honey; but the winter of 1880-81 killed half the bees, which reduced our surplus to 690,000 lbs., making a difference in the two crops of 407,000 lbs. These were very extreme changes.

The yield of 1887 was 1,624,000 lbs.; in 1888 the number of colonies increased, but the yield was reduced to 923,000 lbs.—the effect of dry weather. Pay more attention to packing bees for winter; be more thoughtful about taking honey too close, and increasing too fast. The majority of our winter losses come from diarrhea and starvation.

Our exhibit at the State Fair was creditable, although not as large and impressive as becomes our State. If we ask for more space, we can get it. The business of bee-culture is increasing; every farmer's family has a member who could learn to handle bees. Farmers are advised to grow small fruits—why not produce their own honey? Finally, attend all agricultural societies, for it pays to attend them.

E. H. COLLINS.

BEST METHOD TO GET COMB HONEY.

This subject was ably presented in a well-prepared essay by Geo. C. Thompson, of Southport, Ind., in which he said:

"My method is the result of careful study. To secure a large crop of comb honey, we must have strong colonies. The hive must be full to overflowing with bees. A weak colony may give fair returns of extracted honey, but will not work in the sections so as to be profitable. Construct the hive so as to be easy of access in all parts at all times, and capable of being contracted or expanded at will, as circumstances may demand. The surplus cases should be easy of manipulation. The colonies must be kept strong during the entire year; swarming must be prevented, for, when bees swarm, they do not store as much honey as those which do not swarm."

PREPARING HONEY FOR MARKET.

This was the subject presented by G. H. Hornbuckle, of Glenn Valley, who said:

"First convince the purchaser that it is pure, and just what you represent it to be, as honey is no new article. We must educate the people as to how honey is produced, and from what kind of flowers the best honey is gathered. I find honey on market that people condemn, and should not be

put on the market. At home is the place to establish a market. Never put honey in the hands of commission men. If our people were more educated on the honey-question, we would find a more ready sale. Extracted honey is better than that in the comb."

Action was taken to prepare for a better exhibit at the State Fair, and to secure more and better arranged room.

During the three sessions, a number of essays were read and discussed with much interest. A part of the discussion was too theoretical, as usual, but a number of practical workers from the field, gave us much accurate information on the details of successful management. How easy it is, when a stranger begins to speak, for one of experience to tell whether he is a practical bee-keeper or not. Very often the first sentence betrays him. Theory, unless based on experience and simply reaching into the future to pave the way for experiment, is undesirable in any such meeting. It is not worth a cent. But I must not be misunderstood. The convention was not burdened with it more than such meetings usually are, while one member after another arose promptly, and told his method, and why it succeeded well with him.

At recesses and intermissions, between sittings, the audience was chatting freely on various topics of common interest, and were slow to leave the house.

A communication from Mrs. Wycliffe Mason, spoke of Mr. Mason's recent death, of typhoid fever. Mr. Mason was a prominent member of the society.

Every essay on the programme was read, their being no failures, and a few volunteer essays were offered.

Officers were elected for the ensuing year, as follows: President, E. H. Collins; Vice-President, Ora Knowlton; Secretary, Geo. C. Thompson; and Treasurer, J. M. Hicks.

The following Committee on Programme was selected: Mrs. C. Robbins, and Messrs. Knowlton, Henderson, Myers and Wilson.

The programme for the next meeting devotes the first session to an object lesson adapted to juvenile bee-keepers' by our worthy Secretary, Geo. C. Thompson, in which he will open a hive and show his method of manipulation, and his arrangement of the honey-board and sections. The programme in full will soon be published. It will include exhibits of samples of honey and honey-plants, also supplies, etc., with a list of essays by practical bee-keepers.

Although we had a very pleasant reunion, and made many new and desirable acquaintances, we expect next winter's meeting to be the largest and

best this Society ever held in Indianapolis. The stenographer's report of the meeting will be printed in the State Agricultural Report.—*Indiana Farmer.*

NEW YORK.

Report of the New York State Convention.

The New York State Bee-Keepers' Association began its first session of the 21st annual convention, at 2 p.m., on Feb. 5, 1890, in the Supreme Court room, at Rochester, N. Y. About 50 well-known bee-keepers of the State were present.

President P. H. Elwood called the convention to order, and the Secretary, George H. Knickerbocker, read the minutes of the last meeting. Considerable time was consumed in receiving new members.

METHODS OF REARING QUEENS.

A short essay presented by G. M. Doolittle, on the "New methods of queen-rearing," was read by the Secretary. The essay was merely suggestive of questions relating to queen-rearing. The methods of rearing queens over a queen-excluding honey-board were suggested. Some still claim that queens shall be reared by the swarming system. Mr. Doolittle did not wish to advise the use of the larval system, but he wished to call out a discussion on this point.

President Elwood thought that better queens could be obtained from natural cells, than in any other way. By the other methods, satisfactory queens could be obtained, if pains were taken in selecting the larvæ.

Mr. Doolittle finally said that "when the Creator put the bee in the world, he placed it there under the same conditions as other beings—that is, with the instruction to increase and multiply. The rule of 'the survival of the fittest' reigns in the bee-family. The results were, that we had the very highest quality of queens until man stepped in, and tried to improve upon the Creator's method."

T. H. Cyrenus said that if the same care was taken, and the bees given the attention, under the force method, as under the natural method, satisfactory queens might be obtained. He did not consider queens thus obtained, so hardy, however.

Mr. Doolittle said: "Upon the queen depends all there is in bee-keeping. If you are going to scrimp anywhere, do it some other way than on the queen. You cannot rear a bee or produce a pound of honey without the queen. When this fact comes to be recognized, bee-keepers will find themselves more successful." He also said

that the small cells were apt to hatch first; and the large ones produce the best queens. This was why many destroyed the small cells.

Another question brought up was, if there really was such a thing as an "eight-day queen." Opinions were divided on this subject; the President thought that a queen hatched in much less than ten days, was the result of bees consuming the oldest larvæ. Bees hatched from old larvæ always give much trouble.

EVENING SESSION.

The evening session was opened at 7 o'clock, with a discussion on the question of how to best secure reduced freight rates on honey. The one great trouble in shipping honey, it was developed by the discussion, is the carelessness of the freight-handlers. Mr. Dickinson thought that a shipper should personally superintend his own shipments. From the discussion, it would seem that the Inter-State Commerce Commission is not very popular with the honey-producers. It is impossible to secure reduced rates. Mr. Dickinson thought the Commission was appointed in the interests of the railroads, instead of the shippers.

As a result of the discussion, a committee consisting of O. L. Hershiser, C. G. Dickinson, and W. H. Dodge, of Charlotte, Vt., was appointed to confer with the Northwestern Bee-Keepers' Society, in regard to taking steps to secure reduced freight-rates.

The question, "Has it paid honey-producers to buy Italian and other imported queens?" was discussed in an essay by Ira Barber. In the absence of Mr. Barber, the essay was read by the Secretary. Mr. Barber had a good word for the Italian queen. He thought that she had a good influence, and was perfectly satisfactory.

NEW RACES OF BEES.

Secretary Knickerbocker next read an essay on "The new races of bees." The Syrians were the first dealt with. While Mr. Knickerbocker had a good word for the imported bees, he closed with this bit of advice: "In these times of close competition, low prices, and uncertainty in the honey crop, my advice is, that if you have a good working colony of bees, you should not 'fool' away your money in securing fancy, new and untried races of bees."

An interesting discussion followed Mr. Knickerbocker's essay, "My opinion is," said Chester Olmstead, "that if we took as much pains with the black bees, as with the Italians, they would be more profitable. I find the Italians altogether too liable to swarm."

Mr. Ashby preferred the brown bee. He did not like black ones. Italians, he thought, needed less food for winter than the blacks. The blacks' doing so well in honey-gathering, had mystified him.

Mr. Dickinson thought it was strange that Italian bees had been cultivated here for 28 years successfully, and that bee-keepers were just coming to think them worthless. "A cross is better than a thoroughbred," said he, "for practical purposes. One thing in favor of the Italian queen is, that you can find her when you want her. A black queen cannot be depended upon; she does not stay at home and attend to business. The Italian queen does not wander more than half a mile from home, and it does not take more than an hour to find her."

Mr. Hershiser said that he believed a race of bees given to swarming, if properly cared for, was more profitable as honey-producers. That was why he liked the Italian bees.

Mr. Cyrenus said that as far as money was concerned, the Italians had never helped him out. On the other hand, if the blacks had been given the same care, as to their fine points, as the Italians have had, they would have improved as much as the Italians have.

Speaking on the matter of improving bees, Mr. Betsinger said: "I do not believe there has been, in the past forty years, what can be called 'improvement' in either the Italian or the black bees. It is the bee-keepers, and not the bees, that have improved."

President Elwood said that he believed there was as much difference between various Italian bees, as between Italians and blacks. "No one race would succeed in all parts of the country. In short yields of white honey, the hybrids were superior; for gathering buckwheat honey, he thought that the black bee was superior to the Italian."

An adjournment was taken at the close of the discussion, to 9 o'clock the next morning.

HIVING BEES.

An Experience with a Swarm on a Stump-Root.

Written for the American Bee Journal
BY D. CHALMERS.

On the morning of Aug. 16, 1889, about 9 a.m., I was busy in the harvest-field pulling peas, when a Mr. Erb came to me, and after the ordinary greetings, he informed me that two days previous, he had found a swarm of bees on a stump-root, which he wished me to go and hive for him.

I told him that I doubted very much whether there would be any bees by this time, on the stump, but he assured me that there were.

He told me that he got a couple of young lads (sons of an old foggy) to try and hive them for him, on the day he found them, but it baffled their skill.

To understand the position of the bees, the reader will have to imagine a large pine stump, about 2½ feet in diameter, all charred, and left standing above ground by forest fires; one of its largest roots shot out in a northerly direction for some distance, and then formed two, each branch being about 3 feet long, and their ends were about 18 inches above *terra firma*. On the extremity of one of these roots the bees are supposed to have clustered, as that is where Mr. Erb found them, and when he called in the lads, they brought an old basket-hive with them, which they tried to force the bees to inhabit.

The honey-gathering insects were developed by a kick on the root, and took "the drop" all right, but would not enter the basket "worth a cent," but, instead, kept re-clustering, and the would-be bee-men took them by handfuls, and slammed them on the ground in front of the basket hive, killing many, and irritating the survivors, as myriads betook themselves to stinging both the operators and Mr. Erb.

All attempts to hive the bees proved futile, and had just to leave the bees where found, but charged Mr. Erb 50 cents, to purchase whisky to drive the poison out! So Mr. Erb came to me two days later, very anxious that I should try my skill, and was willing to pay me for it. I thereupon tried to scare him by refusing to leave the harvest-field for less than 50 cents (as the bees were all of three miles away); but he at once accepted my offer.

Then I said to him that it was nonsense, at that time of year, to think of bees starting on nothing, and be able to build enough comb and store sufficient honey to winter on. Mr. E. said that he could not afford to buy anything to help them, and I then offered to furnish a hive and enough combs, from which I had recently been extracting, and if the bees lived until next summer, he could pay me for them; but if, on the contrary, they should succumb, I would take the articles back. He considered my offer—all that he could wish for—and off we started for home, and collected (as I thought) every requirement for the occasion, and were soon at the stump, where, sure enough, we found the bees still clinging to the charred root (strange to say, they had no comb

formed), but had moved back into the crotch.

After placing the hive as near the cluster as possible, and arranging a cloth between them, with a wing I lifted several detachments from the cluster, and dumped them near the entrance; I then applied smoke to the remainder, which would only take wing, and re-cluster, although I believe that most of them visited the hive, but only to fill themselves with honey from the moist combs, and hurry out to soar aloft again, and seemed refreshed for a further journey. All the while it required a free use of smoke to keep them off the root from which they had so recently been driven, and which Mr. Erb had begun to chop off.

There was a strong west wind, which tired the bees, and drove them back a few rods; and while the writer plied the axe, in turn with Mr. E.; the latter went to see what the bees were about, and, upon his return, he told me that they were clustering in the grass. I then carried the hive over and placed it near them for the second time, and got the first sight of the queen (I had, until then, feared that she had come to an untimely end). Every inducement was offered her for a comfortable home, if she would only enter and take her family along; but no, she would only run about on the cluster. Her wings were large and strong, but I judged, by her appearance, that she was a fertile queen, so I caught her by the wings with my right thumb and forefinger, and then entrapped two of her legs between the corresponding members of the left hand, and turned her back downwards, until her wings were almost touching the top of the hive, and with the small blade of a pocket-knife, I cut her right wings off, and placed her near the hive-entrance, but she had no more thought of entering than before; she tried for considerable time to fly, but her efforts were in vain; so after she had reached quite a distance from the hive, I again showed her the entrance to the hive, which she readily entered, and the bees, for the first time, began to go in.

At this juncture, Mr. Erb remarked how quietly they had behaved all the time, but questioned if "I didn't charm them." But a few minutes had elapsed when they were almost all in, when we filled the entrance with grass, and soon had them in a suitable place hard by Mr. E's house, when the grass was removed, and the subdued bees liberated.

After dinner, the hive was opened, and the queen was soon found; the combs were quickly adjusted, and covered up, and instructions given to Mr. Erb, to feed a little sugar syrup every evening.

The bees had not been at liberty more than thirty minutes until several could be seen about the damp pump-platform. The water must have been for their own immediate use, as there was no brood of any kind in the hive, not even an egg.

At the time the bees were hived (Aug. 16), the honey-flow of the season was just opening from swamp flowers, and in less than three weeks Mr. E. was after me to go out and see the bees again, as the combs (10½x13 inches), he thought, were full. I purposed going to see them sooner on the queen's account, fearing lest I had mistaken her fertility; but when I went, I was delighted to find that they had an abundance of honey to winter on, and brood in all stages—of course, none would be matured until the three weeks were up.

I also found queen-cells with eggs in them; this I did not like, but destroyed them, and kept my thoughts to myself, but in reality I considered, by what Mr. E. told me at first, of the handling the bees had received, that the queen had been hurt, and that she now was about to be superseded; and on Oct. 28, my fears were realized, when Mr. Erb told me that he had found the queen-bee carried out, dead. At that time we had a cold spell, with a hard frost, but I promised to go and see his bees on the first fine day; my promise, however, was not fulfilled for two weeks, when I expected a big search for a virgin queen, but I was agreeably surprised to find a fine young queen doing duty, and the colony in prime condition for winter.

Poole, Ont.

MICHIGAN.

Report of the Northeastern Michigan Convention.

The eighth annual meeting of the Northeastern Michigan Bee-Keepers' Association, was held in the Council Chamber, in Lapeer, on Wednesday, Feb. 5, 1890. The President called the convention to order, and the programme then followed:

Mr. R. L. Taylor, of Lapeer, Mich., delivered the following

President's Annual Address:

You have come here to listen to and take part in discussions upon subjects pertaining to apiculture, and presuming that you would prefer, even in a President's address, something relating to that subject, rather than matter of mere congratulation and condolence, I shall devote the time I occupy principally to the former.

You might have been surprised, if you had chanced to call on me last

Thursday or Friday, at seeing me carrying bees out of the cellar to their summer stands, because I have always advised leaving bees, in a cellar, undisturbed till the winter was over. Two facts have moved me to take this new departure, viz: The almost unprecedented mildness of the season, and the uneasiness of the bees. There was, as yet, no appearance of disease, but it seemed impossible to get a temperature such as to prevent the bees of many of the colonies from unduly wasting. It was easy to see, from the eagerness with which the bees took wing, and from the spotting of the covers of the hives in their flight, that they at least thought it a good thing. Were they right?

But I mention the matter more particularly to point a lesson. We must not forget that general advice is given, and rules are laid down, to meet ordinary circumstances; when extraordinary circumstances come in, common sense must be given free play to formulate new rules, if necessary. In bee-keeping, circumstances alter cases so frequently that, to be a successful apiarist, one must be full of resources to adequately meet new contingencies. Unthinking stolidity, at least, is sure to fail.

Early in October, in order to determine the amount of stores possessed by each colony, I weighed each hive. Out of curiosity, I last week weighed a number of those removed from the cellar, and found that they had lost, generally, from 7 to 9 pounds each, though some were found which had lost much less. I judge that not more than half the loss had been incurred while they were in the cellar.

HOW TO FIND THE QUEEN.

Some may have noticed that I lately promulgated what was (to me) a new method of finding queens. I notice some one claims that it is not new; but whether it is or not, it has not been much practiced nor extensively known. It will be found a wonderful relief when queens are to be found in strong colonies, especially when bees are inclined to rob. I think it should be known by every bee-keeper, so I give it briefly here:

If the hive to be operated on is not already provided with a queen-excluding honey-board, and a super of some kind, provide it with them, and in any case see that they are loose, so that they may be quickly removed. Now, with the smoker well equipped in one hand, and a small stone in the other, kneel by the side of the hive, knocking leisurely on the rear end of the brood-chamber with the stone, for about 2 or 3 minutes, during which time, at regular intervals, puff 6 or 8 strong blasts

of smoke directly into the entrance of the hive; then quickly remove the super and the honey-board, turning the latter bottom side up on the ground in front of the hive, when you will find the queen among the bees on the honey-board.

If you are not successful at least almost every time, be assured either that your eyes are not trained to recognize the queen readily, or that you have not followed carefully the directions.

SOME APICULTURAL ITEMS.

I noticed last autumn that my bees, during their last flights, spotted their hives somewhat. Was that any indication of poor stores, or of a poor condition for successful wintering?

We are confronted by a fact, and not a theory, in the condition of our honey markets. We had a poor crop, and yet honey is a drug at low prices. Is this condition of things owing to the mild weather, to the hard times, or to over-production? The crop is barely 2 pounds *per capita* of our population. Do we not fail in getting it sufficiently within reach of the people?

Like all things mundane, we have found that bee-keeping moves in a circle; now it is at the zenith, now at the nadir, and, with most of us, it is slow in passing this lowest point. But I have faith in the future. All things are his who only waits. The ascent is again begun. Discouragement is unprofitable, even in a financial point of view. Let us be prepared to make the most of "the good time coming." There is yet a call for the exercise of all our abilities to compel the choicest favors of Fortune.

It is now, if I mistake not, 7 years since our Association was organized. For a local society, when we consider the frequent lean years latterly in bee-keeping, we have enjoyed very pleasant and profitable annual gatherings. I hope for, and expect, an increasing interest in this Association. Michigan is noted for its bee-keepers. Our State bee-keepers' association is recognized as the leader of its class. There is no reason why our Northeastern should not—if it does not already—stand next to that of the State Association. These meetings are pleasant and profitable in more ways than one. Each one should do something to add to their interest. Every one can ask questions, and they are a very effective means of arousing discussion and eliciting information.

R. L. TAYLOR.

Following the President's address, the first subject discussed was,

FOUL BROOD AMONG BEES.

The nature of this disease attacks the young brood before it is fully hatched out; it is also very contagious,

increases with great rapidity, and soon destroys the whole colony, unless a remedy is applied. There is also danger of transferring the disease from one colony to another, by diseased combs.

A cure for this troublesome disease can be effected by simply shaking the bees into a clean hive, with only foundation, or empty frames, and no comb in it; this effects a cure, so far as the bees are concerned; then put the hives, and everything about them, into water, and boil them thoroughly. This will make the cure sure.

The next subjects considered were the following:

SPRING MANAGEMENT—RACES OF BEES.

In this matter it was agreed to better protect the bees in early spring-time, by packing the hives in saw-dust, shavings, or something similar until settled warm weather is assured.

The races of bees mostly in use now are known as the Italians, hybrids, blacks, Carniolans, Syrians and Cyprians. Some prefer one, some another. Italians are gentle, cling to the combs well, and are good honey-gatherers. They are excellent where the honey-flow is not abundant.

Blacks are good workers in an abundant honey-flow, and of little account unless such is the case. They build the straightest combs and store the whitest honey, and they build their combs more readily. They are irritable and easily shaken from the combs.

Some hybrids are a cross between the Italians and blacks, and have the good qualities of both, but are very irritable, and must be handled with care.

Carniolans are much like the blacks, except that they are quiet and gentle, and cling to the combs better.

Syrians, in appearance, are like the Italians—yellow bees—and have most of their good qualities, except that they are irritable, and do not yield readily to smoke.

VARIOUS BEE-KEEPING QUESTIONS.

"How do you determine when a colony is queenless?" The best way to tell is, by the shape of the capping to the honey. The caps will be of oval shape, rather than flat; by the uneasiness of the bees in the hive; by the bees coming out at the entrance of the hive and looking about, as if in search of something; bees set up a humming and shaking of their wings—then, last but not least, remove the frame and look into the hive.

"How can we keep honey out of the brood-nest?" Give the bees plenty of room in the supers; also, have a little black "blood" in the bees.

"The prevention of robbing:" Close the entrance to give passage but for a

single bee at a time. This is effective, if the bees will defend themselves; if not, remove them to a cellar for a few days, then place them on a new stand, or exchange places with the colony that is the robber.

"Keeping comb honey:" Put in a dry, warm place, with a uniform temperature—the warmer, the better. Eighty degrees is a good warmth.

"The utility of wooden combs:" Their use was considered doubtful as to any advantage to be derived.

"Spraying fruit trees:" It should not be done until the blossoms are dropping off, or otherwise it might possibly injure the bees; besides, there is no advantage to be gained as far as the fruit is concerned. It is rather a loss of labor and capital.

The following officers were chosen for the coming year: President, Hon. R. L. Taylor, of Lapeer; Vice-President, G. W. Baldwin, of Port Huron; Secretary, W. Z. Hutchinson, of Flint; and Treasurer, W. E. Gordon, of Unionville.

It was decided to hold the next annual meeting at Port Huron, Mich., the first Wednesday of February, 1891.

The members were entertained at supper at the residence of Hon. R. L. Taylor.

The evening session consisted of a non-conventional discussion, after which the convention adjourned, the members being pleased with the day's deliberations.

A Special Club Rate.

A Magazine of the choice literary character which the ILLUSTRATED HOME JOURNAL sustains, will add many pleasures to any "family circle." Its beautiful illustrations and interesting reading-matter will make it heartily welcomed at every "fireside" in the land.

We desire that every one of our readers should secure its regular visits during the year 1890, and in order to induce them to do so, we will make this tempting offer:

We will Club the AMERICAN BEE JOURNAL and the ILLUSTRATED HOME JOURNAL, and mail both periodicals during the whole year 1890 for \$1.60, if the order is received at this office by March 31, 1890—when this offer will end, the regular rate being \$1.75.

Postal Notes are no safer to use in letters than bank bills. Any one can get the money on them. A Money Order can be obtained at the post-office or at the express office for 5 cents (only 2 cents more than a Postal Note), and is perfectly safe; if lost it can be re-issued.

Clubs of 5 for \$4.00, to any addresses. Ten for \$7.50, if all are sent at one time.

CONVENTION DIRECTORY.1890. *Time and place of meeting.*

- April 16, 17.—Missouri State, at Marshall, Mo.
J. W. Rouse, Sec., Santa Fe, Mo.
- May 1.—Southwestern Wisconsin, at Boscobel, Wis.
Benj. E. Rice, Sec., Boscobel, Wis.
- May 3.—Susquehanna Co., at Hopbottom, Pa.
H. M. Seeley, Sec., Harford, Pa.
- May 19.—Northern Illinois, at Rockford, Ills.
D. A. Fuller, Sec., Cherry Valley, Ills.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

SELECTIONS FROM OUR LETTER BOX

Appreciates Our Journals.

The AMERICAN BEE JOURNAL I cannot do without, and the ILLUSTRATED HOME JOURNAL is what one needs in a family; there is no trash in it, and no demoralizing stories, long or short, to do harm to those not having tastes formed, or not yet able to discriminate between what ought, and ought not, to be read. I have discontinued one paper that is highly spoken of, and substituted the ILLUSTRATED HOME JOURNAL, which, at its present standard, is excellent.

T. F. KINSEN.

Shiloh, O., Feb. 10, 1890.

Bee-Keeping in West Virginia.

I started in the bee-business in 1888, with 7 colonies of Italian bees, and have increased them to 19. Last year was a very poor one here; there was a great profusion of white clover, but it was so very cool and wet during fruit-bloom, and most of the summer, that my bees did scarcely any good. I had to feed them 200 pounds of sugar and honey. So far they seem to be doing nicely; although this has been an exceptionally warm winter, they do not seem to consume much stores. I have chaff hives, altogether, and therefore I winter the bees on the summer stands. I expect to give the dove-tailed hives a trial the coming summer, if the season admits. I am very much interested in the discussions concerning the thick top-bar; I have never tried it, but will do so as soon as it becomes settled—if in its favor. I use the standard Langstroth frame. We are expecting a better season this year.

S. RAY HOLBERT.

Clarkson, W. Va., Feb. 10, 1890.

Carniolan Bees—Selling Honey.

Last June I sent for a Carniolan queen, and put her into a queenless colony; in two weeks I opened the hive, and found every comb full of brood. I thought then that I had the bees that would do me some good in the future. They were good workers. I put on the surplus case, and they went to work in it. In the fall, when honey commenced to fail, they commenced to rob my Italian bees; in the morning they would be out before the Italians, passing in and out of every hive that I had on the place. I soon decided that this would not do; so I got the smoker, and smoked them to get the queen, and when I found her, off went her head. The bees were of three colors—black, gray, and some had the Italian mark. I will let the reader judge what kind of bees they were. I do not pretend to know anything about the Carniolans.

I winter all of my bees on the summer stands, without any protection—in fact, they have not needed any so far, as the weather is mild. They are all in good condition, with plenty of honey, and are flying most of the time, and bringing in pollen from corn-meal. Honey is plentiful in the market, and sells at 20 cents per pound. I have my honey on hand yet. If I should want to sell it to the merchants, 15 cents per pound is all that they would give me. I sell it to customers for 17 cents per pound.

N. W. AFFLERBAUGH.

Cameron, Neb., Feb. 8, 1890.

Bees Did Well Last Summer.

I have 28 colonies of bees, which did very well last season. I sold 300 pounds of honey at 15 cents a pound. The bees are now in a much better condition than they were last year at this time.

H. G. BROWN.

Eagleville, O., Feb. 9, 1890.

Wintering Bees in the Cellar.

I have 29 colonies of bees in the cellar, and some of them are doing all right, but 4 or 5 colonies are not all right; they came out of their hives, and spotted the fronts all over. I do not know just what the cause is, but it is my intention to try to make a success of the bee-business.

M. C. DAVIS.

Richland Center, Wis., Feb. 12, 1890.

Good Prospects for this Year.

The honey crop of last year was very good; I realized from 4 colonies, spring count, 974 pounds—all comb honey. I extracted only the imperfectly filled sections. Three-fourths of my crop was gathered from white clover, and the rest from Linden. The prospects for this year are good.

A. F. SANGER.

Pilot Grove, Mo., Feb. 8, 1890.

Uneasy Bees—White Clover.

I put 62 colonies into the cellar last winter, and lost 2 queenless hybrid colonies; the rest were all strong. In May I had to feed them, and there were hard times for bees. My crop was 9,500 pounds of extracted honey, which I sold for 6½ cents per pound. My bees are getting uneasy in the cellar, and when there is a nice day, I will take them out for a flight. White clover looks well.

PH. PFRIFFENBERGER.

Addison, Wis., Feb. 5, 1890.

Nameless Disease—Bee-Stings.

This has been one of the most beautiful winters for a long time. Drones have been flying in my apiary for two or three weeks. I put 107 colonies in, and they are all in fine condition so far. The "nameless disease" and poor seasons are the worst things that I have to contend with; the "nameless disease" is a regular puzzler to me. I saw a young bee hatch with it, and have had it commence in colonies after the queen was three years old. I have had queens die with it; drones have it also, but they do not show it as much as workers and queens. I wish that some one would hurry up and find a sure cure for it.

An article was written for one of the bee-papers, telling how he cured bee-stings, by holding the part stung over a lamp. I have cured stings this way for the last six or eight years, only in this way I use a Bingham hot-draft smoker. When I am stung, I rake the sting off, grab the smoker, give

the part stung three or four puffs with the hot air and smoke, and the pain is gone instantly; that is, if I am stung on the wrist. The Bingham smoker is better for the curing of bee-stings, than any other smoker that I have used. Keep a red-hot fire in the smoker, and you have the best remedy for bee-stings that I know of.

B. T. BALDWIN.

Marion, Ind., Feb. 10, 1890.

A Very Mild Winter.

I think that the AMERICAN BEE JOURNAL grows better every issue—in fact, I would not keep bees without it. The winter, so far, has been quite mild, so that bee-keepers who winter their bees on the summer stands, consider themselves in luck; to-day it looked like an April day, and the bees roared as in summer time, but we expect to have enough bad weather in March and April, to make up for this fine weather.

MARION MILLER.

Le Claire, Iowa, Feb. 4, 1890.

Digested Nectar—Mild Winter.

We are living in a rapidly-advancing age, and nothing but a double-quick pace will keep one to the front. Theories born yesterday, are pronounced as facts to-day. If Solomon were on earth to-day, he would probably reverse his old "song," so as to make it read thus: That which we have done, we will do no more, and that which we have not done, we will do, or die in trying; for everything shall be new under the sun.

Only a few months ago bees were stinging acid into honey with their tails; now they digest it there; and if "digested" would only stop there, but it will not, or does not seem to do so. The article from Mr. Kanzler, on page 70, brings us fully up to that date; and I will also add that man also is digested eggs, hogs, etc. This brings us up to date. Now let us try to keep up to the times in bee-culture, and, above all, do not allow our literature to get behind.

I have lived in this vicinity for over 55 years, and this is the mildest winter that I ever knew. Bees went into winter quarters well supplied with stores, and the weather has been such as to enable them to fly about half the time.

D. MILLARD.

Mendon, Mich., Feb. 5, 1890.

Honey from Golden-Rod, etc.

On reading several recent numbers of the BEE JOURNAL, I have been surprised in noticing how many places in the United States report a failure in golden-rod as a nectar-bearing plant. In eastern Kansas, it is our best hope for fall honey, and several times it has saved us from total failure—particularly in 1888, in which year there was no honey from fruit-bloom or clover, but a very abundant flow of nectar from golden-rod. In 1889, there was quite a good yield from clover—an average of 60 pounds per colony; in the fall, golden-rod bloomed freely, and for a few days bees were thick on it, neglecting every other flower, until a frost in one night quite stopped all further honey-flow for that season. The conclusion would seem to be, that golden-rod must have rain and tolerably warm weather, to produce nectar, and, under these conditions, it will do grandly. Give it a further trial, before condemning it as "no good."

We are hopeful for this year; clover is abundant, having been well protected by snow during our severest weather, and I hope to report 100 pounds per colony, or better, next fall.

WM. M. ROWE.

Lawrence, Kans., Feb. 5, 1890.



ALFRED H. NEWMAN,
BUSINESS MANAGER.

Business Notices.

Subscribers who do not receive their papers promptly, should notify us at once.

Money in Potatoes, by Mr. Joseph Greiner. Price, 25 cents, postpaid. For sale at this office.

Send us one **NEW** subscriber, with \$1.00, and we will present you with a nice Pocket Dictionary.

Red Labels are nice for Pails which hold from 1 to 10 lbs. of honey. Price \$1.00 per hundred, with name and address printed. Sample free.

Calvert's No. 1 Phenol, mentioned in Cheshire's Pamphlet on pages 16 and 17, as a cure for foul brood, can be procured at this office at 25 cents per ounce, by express.

The date on the wrapper-label of this paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to advance that date another year.

Please send us the names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you.

Any of the Political Dollar Weekly Newspapers will be clubbed with our JOURNAL at \$1.85 for the two; or with both our HOME JOURNAL and BEE JOURNAL for \$2.50 for all three papers.

As there is another firm of "Newman & Son" in this city, our letters sometimes get mixed. Please write *American Bee Journal* on the corner of your envelopes to save confusion and delay.

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When talking about Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we will present you with a copy of the Convention Hand Book, by mail, postpaid. It sells at 50 cents.

We offer the Monthly Philadelphia Farm Journal, and either the AMERICAN BEE JOURNAL or ILLUSTRATED HOME JOURNAL for one year, for the small sum of \$1.20. Or, we will give it free for one year to any one who will send us one new subscriber for either of our Journals with \$1.00 (the subscription price).

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Bee-Keepers' Advance.....	1 50.....	1 40
Canadian Bee Journal.....	2 00.....	1 80
The 7 above-named papers.....	5 25.....	5 00
and Langstroth Revised (Dadant).....	3 00.....	2 75
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Quinby's New Bee-Keeping.....	2 50.....	2 25
Doolittle on Queen-Rearing.....	2 00.....	1 75
Bees and Honey (Newman).....	2 00.....	1 75
Binder for Am. Bee Journal.....	1 60.....	1 50
Dzierzon's Bee-Book (cloth).....	3 00.....	2 00
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Farmer's Account Book.....	4 00.....	2 20
Western World Guide.....	1 50.....	1 30
Heddon's book, "Success".....	1 50.....	1 40
A Year Among the Bees.....	1 75.....	1 50
Convention Hand-Book.....	1 50.....	1 30
Weekly Inter-Ocean.....	2 00.....	1 75
Toronto Globe (weekly).....	2 00.....	1 70
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N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King Street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.
50E26t 1mly.

Convention Notices.

The spring meeting of the Northern Illinois Bee-Keepers' Association, will meet at the residence of D. A. Fuller, in Cherry Valley, Ill., on May 16th, 1890.
D. A. FULLER, Sec.

The next regular meeting of the Southwestern Wisconsin Bee-Keepers' Association will be held at Boscobel, Wis., on Thursday, May 1, 1890, at 10 a.m.
BENJ. E. RICE, Sec.

The spring meeting of the Missouri State Bee-Keepers' Association, will be held at Marshall, Saline Co., Mo., on Wednesday and Thursday, April 16 and 17, 1890, in the County Court Room. Reduced rates at the hotel, for bee-keepers, have been secured, and a committee is at work to secure rates on the railroads. A cordial invitation is extended to bee-keepers everywhere, and especially to those of Missouri. A number of essays from prominent bee-men are expected, and an interesting time is anticipated.
J. W. ROUSE, Sec.

HONEY AND BEESWAX MARKET.

DENVER, Jan. 27.—1-lb. sections, 13@15c.; Extracted, 7@8c. Beeswax, 20@25c. Market well supplied. Demand moderate.

J. M. CLARK COM. CO., 1421 Fifteenth St.

KANSAS CITY, Jan. 25.—Market continues very dull. Demand very light. Weather is entirely too warm. We quote white 1-lb. comb, 13c.; fall, 1-lbs., 10@11c.; white, 2-lbs., 11@12c.; fall, 2-lbs., 10c. Extracted, white, 7@7½c.; amber, 5@6c. Beeswax, 22c.

CLEMONS, CLOON & CO.,
Cor. 4th and Walnut Sts.

CHICAGO, Jan. 22.—We quote: White clover 1-lbs., 11½@12½c.; 2-lbs., 10@11c. Basswood 1-lbs., 10½@11c. Buckwheat 1-lbs., 8@9c. Extracted, 6½@7½c. Beeswax—bright, 25@26c.; dark, 23@24c.

S. T. FISH & CO., 189 S. Water St.

KANSAS CITY, Jan. 21.—Demand light and prices lower. Very fancy 1-lbs., 12 in a crate, 13c.; good white 1-lbs., 12@12½c.; dark 1-lbs. and 2-lbs., 8@10c.; white 2-lbs., 11@12c. Extracted, white, 6@7c.; dark, 5@6c.

HAMBLIN & BEARSS, 514 Walnut St.

CHICAGO, Feb. 13.—Honey is selling with more freedom than for some time, but prices remain at 12@13c for the best; 10@11c for what is not prime, and 8@10c for dark and buckwheat honey. Extracted is not so active, with prices at 7@8c for finest grades, and 6c for dark and off-color. Beeswax, 25c for yellow.

R. A. BURNETT, 161 S. Water St.

DETROIT, Feb. 10.—Comb honey is now quoted at 11@13c. The supply is not large; sales are slow. Extracted, 7@8c. Beeswax, 24c.

M. H. HUNT, Bell Branch, Mich.

BOSTON, Feb. 15.—Best 1 lbs., 16c; best 2 lbs., 15c. Extracted, 7@9c. Beeswax, 23c. Trade is dull.

BLAKE & RIPLEY, 57 Chatham St.

CINCINNATI, Feb. 14.—Good demand for extracted honey, in glass jars, while demand from manufacturers is slow; it brings 5@8c per lb. Comb honey, 12@15c a lb. for best white.

Beeswax is in good demand at 20@24c. for good to choice yellow. C. F. MUTH & SON,
Corner Freeman & Central Aves.

The Report of the proceedings of the 20th annual session of the International American Bee-Association is now published. The price is 25 cts., postpaid. It contains, besides the report, the new songs and music then used, and engravings of the present officers as well as the retiring ones. In all, it contains 36 pages. It is for sale at this office.

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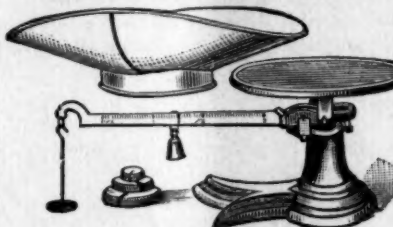
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